dominated by chestnut oak that is codominant in some areas with Virginia pine. Appreciable numbers of scarlet oak (*Quercus coccinea*), black oak (*Quercus velutina*), and mockernut hickory (*Carya alba*) are present in some areas, and shortleaf pine (*Pinus echinata*) and blackjack oak (*Quercus marilandica*) are infrequent. Red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), sourwood, and persimmon also appear in the understory. Shrubs are patchy in distribution and include mountain laurel, black huckleberry, horse-sugar, sparkleberry (*Vaccinium arboreum*), and dryland blueberry. Several rare shrubs occur in these forests including bear oak (*Quercus ilicifolia*), Piedmont indigo-bush (*Amorpha schwerinii*), and dwarf juniper (*Juniperus communis* var. *depressa*). Vines such as common greenbrier (*Smilax rotundifolia*) and muscadine (*Vitis rotundifolia*) are common in some areas. Herbs are quite sparse but include galax (*Galax urceolata*), trailing arbutus (*Epigaea repens*), pipsissewa (*Chimaphila maculata*), and common yucca (*Yucca filamentosa*). In some areas, the rare Appalachian golden-banner (*Thermopsis mollis*) and the uncommon beargrass (*Xerophyllum asphodeloides*) and Biltmore carrion-flower (*Smilax biltmoreana*) are present.

Several other community types are present in the site. Xeric Hardpan Forest, which is a rare type, occurs on a small knoll near the headwaters Clark Fork Creek, east of Love Valley. It has a mature canopy of dry site trees such as post oak (Quercus stellata), blackjack oak, shortleaf pine, and sourwood with an understory of sparkleberry, deerberry, mayberry (Vaccinium elliottii), and willow oak seedlings. Poison oak (Toxicodendron pubescens) is present, as are northern oat grass (Danthonia spicata), butterfly weed (Asclepias tuberosa), dwarf iris (Iris verna), goat's-rue (Tephrosia virginiana), and reindeer lichen (Cladonia sp.). Fair to good quality Dry Oak--Hickory Forest occurs in the southern part of park on low ridges. The community has a canopy of white oak (Quercus alba), scarlet oak, black oak, and southern red oak (Quercus falcata) with occasional blackjack oak. Black gum and sourwood are common in the understory. Shrubs such as deerberry (Vaccinium stamineum), black huckleberry, and sparkleberry. Herbs typical of dry piedmont forests are present. Lower slopes and ridges support good examples of Dry-Mesic Oak--Hickory Forest that contain oaks, hickories, and species of fairly moist soils, such as yellow poplar (Liriodendron tulipifera), red maple, and white oak. A single example of a Basic Mesic Forest occurs between Dixon Gap and the state line. It has a canopy of trees and shrubs of moist forests, including those that prefer rich, high pH soils such as red bud (Cercis canadensis) and paw-paw (Asimina parviflora). Herbs that prefer rich soils are also present. Several small Low Elevation Seep communities occur southeast of the Kings Mountain ridge on headwater tributaries of Clark Fork and South Crowders Creek, from Sherrars Gap to near the state line. These continually wet communities support species that are uncommon elsewhere in the site, such as cinnamon fern (Osmunda cinnamomea), royal fern (Osmunda regalis), New York fern (Thelypteris noveboracensis), southern lady fern (Asplenium asplenioides) and shrubs such as spicebush (Lindera benzoin), possum-haw (Viburnum nudum), and tag-alder (Alnus serrulata). Buttonbush (Cephalanthus occidentalis) occurs in one of the seeps.

A population of the rare pygmy rattlesnake (Sistrurus miliarius) is known to be extant at the site from observations in the 1990s at Crowders Mountain, Kings Pinnacle, and vaguely from southeastern Cleveland County. These records indicate that Crowders Mountain and Kings Mountain are the westernmost known stronghold for this species in North Carolina. Rare butterflies include the northern oak hairstreak (Fixsenia favonius ontario), recorded from near Stepps Gap and King's hairstreak (Satyrium kingi), recorded from Kings Pinnacle. A historic record exists for the rare large witch-alder (Fothergilla major) at Crowders Mountain. A vague, historic record for Georgia aster (Aster georgianus) is documented from Gaston County near Crowders Mountain. A vague, historic record exists for the rare smooth sunflower (Helianthus laevigatus) from the Cleveland County part of the site. These records of historic populations may still be extant.